

Form PTO-1449 INFORMATION DISCLOSURE CITATION IN AN APPLICATION <i>(Use several sheets if necessary)</i>	Docket Number (Optional) 2424.4US	Application Number Not yet assigned 10/008339
	Applicant Herron et al.	
	Filing Date November 13, 2001	Group Art Unit Unknown 1641

U.S. PATENT DOCUMENTS

EXAMINER INITIAL	DOCUMENT NUMBER	DATE	NAME	CLASS	SUBCLASS	FILING DATE IF APPROPRIATE
u	#3,939,350	02/17/76	Kronick et al.			
	#3,959,078	05/25/76	Guire			
	#4,050,895	09/27/77	Hardy et al.			
	#4,166,105	08/28/79	Hirshfeld			
	#4,235,869	11/25/80	Schwarzberg			
	#4,264,766	04/28/81	Fischer			
	#4,298,685	11/03/81	Parikh et al.			
	#4,429,008	01/31/84	Martin et al.			
	#4,447,546	05/08/84	Hirschfeld			
	#4,450,231	05/22/84	Ozkan			
	#4,558,014	12/10/85	Hirschfeld et al.			
	#4,562,157	12/31/85	Lowe et al.			
	#4,596,723	06/24/86	Kaufman et al.			
u	4,627,445	12/09/86	Garcia et al.			
u	#4,708,871	11/24/87	Geysen			

FOREIGN PATENT DOCUMENTS

	DOCUMENT NUMBER	DATE	COUNTRY	CLASS	SUBCLASS	Translation	
						YES	NO
u	#WO 81/00912	04/02/81	PCT				
u	#WO 89/09408	10/05/89	PCT				

OTHER DOCUMENTS

(Including Author, Title, Date, Pertinent Pages, Etc.)

u		#Carlsson, "Protein Thiolation and Reversible Protein-Protein Conjugation", <u>Biochem J.</u> , 173, pp. 723-737, 1978.
u		#Ciana, Leopoldo Della, "Electrochemiluminescence Immunosensors And DNA Probes For Clinical Diagnostics", Abstract, p. 19.
u		Fitch, R., "Polymer Colloids: A Comprehensive Introduction", <u>Academic Press, Inc.</u> , 10 pages, 1997.

EXAMINER	C. Chai	DATE CONSIDERED	12/14/02
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EXAMINER: Initial if citation considered, whether or not citation is in conformance with MPEP § 609; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to the applicant.

Form PTO-1449

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u	#4,722,906	02/02/88	Guire			
	#4,775,637	10/04/88	Sutherland et al.			
	4,806,312	02/21/89	Greenquist			
	#4,810,658	03/07/89	Shanks et al.			
	#4,820,649	04/11/89	Kawaguchi et al.			
	#4,826,759	05/02/89	Guire et al.			
	#4,852,967	08/01/89	Cook et al.			
	#RE 33,064	09/19/89	Carter et al.			
	#4,880,752	11/14/89	Keck et al.			
	#4,909,990	03/20/90	Block et al.			
u	#4,973,493	11/27/90	Guire			

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	DOCUMENT NUMBER	DATE	COUNTRY	CLASS	SUBCLASS	Translation	
						YES	NO
u	#2,220,083	12/28/89	GB				
	#9,001,166	02/08/90	PCT				
	#9,006,503	06/14/90	PCT				
	#9 113 339	09/05/91	PCT				
u	#9,115,751	10/17/91	PCT				

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u		#Harmer, "Guided-Wave Chemical Sensors", <u>Electrochem. Soc.</u> 87-9 (Proc. Synp. Chem. Sens.), pp. 409-427, 1987.
u		#Harrick et al., "Multiple Internal Reflection Fluorescence Spectrometry", <u>Analytical Chemistry</u> , Vol. 45, No. 4, pp. 687-691, April 1973.
u		#Herron, "Fluorescent immunosensors using planar waveguides", <u>SPIE</u> , Vol. 1885, Proceedings of Advances in Fluorescence Sensing Technology, pp. 28-39, 1993.

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12/14/03

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u	#4,978,503	12/18/90	Shanks et al.			
	#4,979,959	12/25/90	Guire			
	#4,997,278	03/05/91	Finlan et al.			
	#5,002,582	03/26/91	Guire et al.			
	#5,006,333	04/09/91	Seifer et al.			
	#5,006,716	04/09/91	Hall			
	#5,043,278	08/27/91	Nagaoka et al.			
	#5,061,857	10/29/91	Thompson et al.			
	#5,071,216	12/10/91	Sullivan			
	#5,071,217	12/10/91	Birch			
u	#5,073,484	12/17/91	Swanson et al.			

FOREIGN PATENT DOCUMENTS

	DOCUMENT NUMBER	DATE	COUNTRY	CLASS	SUBCLASS	Translation	
						YES	NO
u	#0 478 137	01/04/92	EP				
	#9,209,892	06/11/92	PCT				
	#9 216 838	10/01/92	PCT				
	#WO 92/16838	10/01/92	PCT				
u	#0 517 516 A1	12/09/92	EP				

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u		#Huang, Shao-Chie, "PEG derivatives as tethers for site-directed immobilization of oxidized antibody", title page, abstract (pages iv-v), and pp. 35-39.
u		#Huang, Shao-Chie, "PEG Derivatives As Tethers For Site-Directed Immobilization Of Oxidiz d Antibody", Master's Thesis, November 1991.
u		#Ives, Jeffrey T., "Optical waveguide sensors: characterization of evanescent and scatter excitation," Ph.D. dissertation submitted to Dept. of Bioengineering, University of Utah, June 1990.

EXAMINER <i>C. Chin</i>	DATE CONSIDERED <i>12/14/03</i>
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EXAMINER INITIAL	DOCUMENT NUMBER	DATE	NAME	CLASS	SUBCLASS	FILING DATE IF APPROPRIATE
u	#5,081,012	01/14/92	Flanagan et al.			
	#5,096,807	03/17/92	Leaback			
	#5,135,876	08/04/92	Andrade et al.			
	#5,156,976	10/20/92	Slovacek et al.			
	#5,166,515	11/24/92	Attridge			
	#5,168,537	12/01/92	Rajasekharan et al.			
	#5,182,216	01/26/93	Clayton et al.			
	#5,186,897	02/16/93	Eason et al.			
	#5,192,502	03/09/93	Attridge et al.			
	#5,217,492	06/08/93	Guire et al.q			
u	#5,242,838	09/07/93	Bergstrom et al.			

	DOCUMENT NUMBER	DATE	COUNTRY	CLASS	SUBCL ASS	Translation	
						YES	NO
u	#0 519 623 A2	12/23/92	EP				
u	#943673	10/10/95	MX				

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u		#J. Chromatography 604: 63-71, Caldwell, Li, Li and Dalglish, "Adsorption behavior of milk proteins of polystyrene ITEX", Elsevier Science Publishers, 1992.
u		#Lee, "Protein-resistant surfaces prepared by PEO-containing block copolymer surfactants", <u>Journal of Biomedical Materials Research</u> , pp. 351-368, 1989.
u		#Lakowicz, Joseph R., "Fluorescence Lifetime-Based Sensing And Imaging", Abstract, p. 5.

EXAMINER C. Chui	DATE CONSIDERED 12/14/03
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u	#5,248,620	09/28/93	Sluka et al.			
	#5,258,041	11/02/93	Guire et al.			
	#5,263,992	11/23/93	Guire			
	#5,344,784	09/06/94	Attridge			
	5,380,668	01/10/95	Herron et al.			
	#RE 34,394	09/28/93	Bunting			
	#5,436,161	07/25/95	Bergstrom et al.			
	5,512,492	04/30/96	Herron et al.			
	#5,552,272	09/03/96	Bogart			
	5,580,794	12/03/96	Allen			
u	5,677,196	10/14/97	Herron et al.			

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						YES	NO

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u		#Leiner, M.J.P., "Optical Sensors For In Vitro Blood Gas Analysis", Abstract.
u		#Ligler et al., "Evanescent Wave Optical Fibre Sensors", Abstract, p. 75.
u		#Liu, Benjamin L., "Clinical Requirements For Optical Immunosensors", Abstract, p. 13.

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EXAMINER INITIAL	DOCUMENT NUMBER	DATE	NAME	CLASS	SUBCLASS	FILING DATE IF APPROPRIATE
u	5,814,565	09/29/98	Reichert et al.	—	—	
u	5,832,165	11/03/98	Reichert et al.	—	—	
u	5,846,842	12/08/98	Herron et al.	—	—	

FOREIGN PATENT DOCUMENTS							
DOCUMENT NUMBER	DATE	COUNTRY	CLASS	SUBCLASS	Translation		
					YES	NO	

OTHER DOCUMENTS		(Including Author, Title, Date, Pertinent Pages, Etc.)
u		#Masuda, Kenji, "Study Of The Sensitivity Of Evanescent Wave Immunoassay", Abstract, p. 11.
u		#Multiple Internal Reflection Fluorescence Spectrometry, Harrick, N.J., and Loeb, George I., Analytical Chemistry, Vol. 45, No. 4, April 1973, pp. 687-691.
u		#O'Keeffe et al., "Development Of A LED Based Phase Fluorimetric Oxygen Sensor Using Evanescent Wave Excitation Of A Sol-Gel Immobilized Dye", Abstract, p. 149.
u		#O'Neill et al., "Use Of An Optical Biosensor To Measure Prostate Specific Antigen In Whole Blood", Abstract, p. 20.
u		#Particle Size Distribution II, Li, J., Caldwell, K.D., and Tan, J.S., Chapter 16, "Size analysis of a block copolymercoated polystyrene latex", pub. American Chemical Society 1991.
u		#Robinson, Grenville, "The Commercial Development Of Planar Optical Biosensors", Abstract.
u		#Sacco et al., "Fibre-Fluorescence Immunosensors Based On Evanescent Wave Detection", Abstract, p. 52.

EXAMINER <div style="text-align: center; font-family: cursive; font-size: 1.2em;">C. Chin</div>	DATE CONSIDERED <div style="text-align: center; font-family: cursive; font-size: 1.2em;">12/14/03</div>
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cc	5,919,712	07/06/99	Herron et al.			
↓	5,961,924	10/05/99	Reichert et al.			
↓	Des.426,783	06/20/00	Christensen et al.			
cc	6,108,463	08/22/00	Herron et al.			

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						YES	NO

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cc		#Slovacek et al., "Application Of A Plastic Evanescent Wave Sensor To Immunological Measurements Of CKMB", Abstract, p. 16.
cc		#van Erp et al., "Affinity of monoclonal antibodies", <u>J. Immunol. Methods</u> , 140:235-241, 1991.

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#Pursuant to 37 C.F.R. § 1.98(d), copies of the previously identified patents are not being provided since they were previously cited by or submitted to the Office in the following prior application:

Serial No.: 09/516,307

Filed: March 1, 2000

For: APPARATUS AND METHODS FOR MULTI-ANALYTE HOMOGENEOUS FLUORO-IMMUNOASSAYS

which application is being relied upon for an earlier filing date under 35 U.S.C. § 120.